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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,889	07/14/2003	Ralph Cilevitz	GC-520	5874

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PARKER INTELLECTUAL PROPERTY LAW OFFICE
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EXAMINER

CORDRAY, DENNIS R

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,889

Applicant(s)

CILEVITZ, RALPH

Examiner

Dennis Cordray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4,5,7,9-15 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4,5,7,9-15 and 32-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's arguments filed 9/11/2006 have been fully considered but they are not persuasive.

Applicant argues that the limitation of "said anti-static paper has an ash content of less than 15% by weight" is not disclosed by Armington et al and Sonnabend. As discussed in the rejection, Armington et al does not use paper containing fillers. Since the ash content is a reflection of inorganic filler content, it is thus reasonable to expect the ash content of Armington et al's paper to be below the claimed 15%.

Applicant also argues that Armington et al squeezes the liquid into the paper and therefore saturates the paper. Applicant further argues that saturation of the paper teaches away from the instant invention in which a suppressant is used to prevent saturation of the paper with anti-static agent. Applicant also argues that using the thickener of Sonnabend to minimize surface penetration is in contrast with the teaching of Armington et al, who squeezes the saturant into the paper. Due to the amended claims, the Sonnabend reference has not been used. The treatment of saturation is discussed in detail in the following paragraphs and below in the rejection of Claim 1 under 35 U.S.C. 112, first paragraph.

Applicant clarifies the meaning of "not suppressing" as meaning that the anti-static agent is not restricted in its being delivered to the interstices and that the extent of delivery is about the same in the presence or absence of the viscosity increasing agent. The explanation is confusing, since the purpose of the viscosity increasing agent is to

limit saturation, and limiting saturation would inherently limit penetration into the intersitices. In any case, the point is now moot as pertains to the amended claims.

It is also noted that Applicant states on p 5 that "the exact degree of penetration of the base paper is not critical" and in the very next statement, "The important point is that saturation be less than complete saturation." The two statements appear to be in direct conflict with each other. Less than complete saturation implies that the degree of penetration is very critical.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites "without saturating said fibrous base paper". The Specification as filed does not give sufficient support for this negative limitation (see MPEP 2173.05(i), part of which is reproduced below).

2173.05(i) Negative Limitations

Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also Ex

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parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff'd mem., 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. Ex parte Parks, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993). See MPEP § 2163 - § 2163.07(b) for a discussion of the written description requirement of 35 U.S.C. 112, first paragraph.

The Specification is unclear as to whether the substrate can be saturated or not. On p 10, lines 1-2 recite, "The sizing controls amount of saturant that saturates the base paper. Completely saturating the paper without sizing is highly disadvantageous." The first statement indicates that the base paper can be saturated with some amount of saturant, while the second statement indicates that complete saturation is highly disadvantageous. From these statements alone, it appears that the term "saturation" as used in the instant invention can have more than one value, a less than complete saturation and a complete saturation. The second statement does not prohibit complete saturation as one embodiment of the invention, but appears to indicate that complete saturation is not a preferred embodiment. The meaning of "completely saturating" versus "saturates" is not made clear.

The degree of saturation is not clarified in other areas of the Specification. Page 3, lines 17-19 recite a viscosity increasing agent that suppresses saturation while simultaneously not suppressing delivery of the anti-static agent to the interstices of the base paper. As discussed in a previous Office Action, to suppress does not necessarily mean "to prohibit", but can also mean "to hold back" or "to reduce the

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incidence or severity of.” Page 4, lines 4-6 recite, “The penetration of the saturant into said base paper is facilitated by incorporating an internal sizing, in the range from 0.5 to 30 lbs of sizing per ton of base paper. The penetration deposits the static dissipative agent in the interstices of said fibrous base paper.” The statements seem to indicate that the sizing facilitates, or makes easier, the penetration of saturant into the base paper. How or why the sizing helps the penetration is not clear because facilitating penetration is in direct opposition to the effect of the viscosity increasing agent, which suppresses saturation, and therefore penetration of saturant into the base paper. Page 6, lines 3-5 also recite base paper additives to facilitate the penetration of the saturant. Page 6, lines 16-18 recite a porosity to facilitate penetration of the saturant. Page 7, lines 2-4 again recite that the sizing facilitates penetration of the saturant. Thus, the limitation “without saturating said fibrous base paper” is not supported from the references in the Specification and constitutes new matter.

It is also noted that Claim 1 does not specify what material the base paper is not saturated with. Since the anti-static agent penetrates into the interstices of the paper, can the base paper be saturated with the anti-static agent, even if less than complete saturation? Can the paper be saturated with the carrier, or the viscosity increasing agent?

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 35 recites "a maximum voltage decay rate of approximately" without reciting a value for the decay rate. It is assumed for the purpose of this examination that the decay rate value is "approximately two seconds" as recited on p 5, line 17 of the Specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4-5, 7, 9-15 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armington et al (4806410) in view of Lorenz (5645855).

Armington et al discloses a method for making anti-static paper. Two methods are disclosed and are illustrated in Figures 1 and 2. The first process, application of a liquid anti-static material to the formed paper during the papermaking process (i.e.-on-machine sizing/impregnating), is illustrated in Figure 1. The second method, application of a liquid anti-static material to the previously formed paper (i.e.-off-machine sizing/impregnating), is illustrated in Figure 2. In both cases the liquid is squeezed into the web via conventional sizing apparatus, thus inherently being deposited into the interstices of the paper (col 3, lines 18-36; col 4, line 30 to col 5, line 3).

In the method of Figure 1, the paper has a preferred porosity of about 5 to about 15 sec/100 ml as recorded on a Gurley densitometer prior to application of the anti-static liquid (col 5, lines 11-16). In the off-machine sizing method, the porosity can be the same as used in the on-machine method or at least less than 25 sec/100 ml (col 9, lines 35-48). The disclosed range overlaps the claimed porosity range.

The anti-static agent is a water-soluble electroconductive quaternary ammonium polymer (col 5, lines 35-38). Table 9, cols 13 and 14, shows compositions applied to the paper, comprising anti-static/conductive polymer and modified starch, having 11-20 wt% solids. The ratio of conductive polymer to starch ranges from 1:1 (50% polymer and 50% starch) to 9:1 (90% polymer and 10% starch), which significantly overlaps the claimed range. Addition of the starch increases the viscosity (see entries in Table 9 for no modifier (32 cPs) and with starch added (58-162 cPs). Armington also discloses that it is well known to size papers to improve surface characteristics as well as resistance to grease, oil and water (col 13, lines 48-51). Typical internal sizing agents are alkyl ketene dimers and alkyl succinic anhydrides, which are typically applied in an amount of about 1-3 lb/ton) (see Biermann, *Pulping and Papermaking*, Academic Press, Inc., San Diego 1993, p 198). The typical range lies within the claimed range.

In the Examples, Armington et al does not use paper containing fillers. Since the ash content is a reflection of inorganic filler content, it would have been obvious to obtain the ash content of Armington et al's paper below the claimed 15%.

The paper can be made from kraft wood, recycled paper and soft wood pulp (col 4, lines 4-12).

Table 2, cols 7 and 8 discloses a moisture content of the paper of around 5%, which lies in the middle of the claimed range. Table 2 also discloses basis weights of papers from 29.2 to 33.4 lb/ream (ream is defined in the paragraph below the table as 3000 ft²), which corresponds to a range of 47.6 to 54.9 g/m², thus lying within the claimed range.

Figure 3 shows the paper formed into a void-filler product having an irregular concave curvilinear surface (col 16, lines 52-60). The disclosed shape is non-uniform and obviously cannot be nesting.

The paper has a voltage decay time of approximately two seconds or less, upon grounding, at no greater than approximately 15% or less relative humidity, and from approximately 5,000 volts to technical zero voltage (col 2, lines 1-24 and 50-59).

In some embodiments, the paper is used for packaging, for instance in wrapping and protecting electronic components (col 2, lines 60-65).

The anti-static paper of Armington et al has the same composition and structure as the claimed anti-static paper, thus inherently has, or it would have been obvious to obtain the same low linting property because, where the claimed and prior art apparatus or product are identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

Armington et al does not disclose applying a releasably bonding adhesive over a portion of the surface of the paper.

Lorenz discloses a pressure sensitive adhesive containing an electrolyte for use on closure strips for anti-static electronic packaging, anti-static sticky mats for clean rooms and for attaching photographic or X-ray film to spindles of film canisters. The adhesive is tacky yet is readily peelable from the object to which it is adhered, thus is releasable (col 1, lines 16-21 and 33-40).

The art of Armington et al, Lorenz and the instant invention is analogous as pertaining to anti-static material that has a releasable adhesive applied to a portion of the surface. It would have been obvious to one of ordinary skill in the art to make a mat or package having a portion of the surface covered with a releasable adhesive from the paper of Armington in view of Lorenz as a well known application of anti-static paper.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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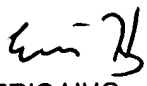
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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